

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition
of the City of Arcata for
Review of Order No. 78-25, Of
the California Regional Water
Quality Control Board, North
Coast Region. Our File No. A-196.

Order No. WQ. 78-17

BY THE BOARD:

On January 25, 1978, the California Regional Water Quality Control Board, North Coast Board (Regional Board), adopted Order No. 78-25, an Order directing the City of Arcata (Arcata) to cease and desist from discharging waste in violation of waste discharge requirements contained in Orders Nos. 74-218 (NPDES Permit No. CA0022713) and 76-141. Order No. 78-25 contains a prohibition on additional discharges to the sewer system. On February 14, 1978, the State Board received a petition for review of Order No. 78-25. This petition was amended on February 16, 1978, and March 28, 1978.

I. BACKGROUND

The City of Arcata is located at the extreme northeast edge of Humboldt Bay, Humboldt County. Sewage from the Arcata service area is conveyed to the treatment plant site at the edge of the Bay. Wastewater flow rates of approximately 1.5 mgd in summer months to 3.2 mgd for the wet weather season are processed through the treatment units

which consist of the following: the headworks which receives incoming raw waste, measures flow, grinds solids, settles grit and pumps to the clarifiers; two primary clarifiers which settle solids and skim floatables; an aeration lagoon with three aerators to provide BOD oxidation; a sedimentation lagoon to settle solids passed from the aeration lagoon or bypassed from the primary clarifiers; a 50-acre oxidation pond enclosed by dikes at the intertidal edge of Arcata Bay which provides quiescent conditions for further oxidation; and a chlorination-sulfonation unit to provide disinfection and to neutralize residual chlorine.

II. CONTENTIONS AND FINDINGS

1. Contention: Arcata contends that the Regional Board action is arbitrary and capricious and that the Order is not supported by substantial evidence or any evidence whatsoever.

Finding: The specific waste discharge requirements which the Regional Board found are being violated or threaten to be violated are as follows:

Order No. 74-218

"A. EFFLUENT LIMITATIONS

"1. Representative samples of the discharge shall not contain constituents in excess of the following limits:

<u>Constituents</u>	<u>Units</u>	<u>30-Day Average^a</u>	<u>7-Day Average^b</u>	<u>Daily Mean</u>	<u>Daily Maximum</u>	<u>Ninety Percentile</u>
BOD (20° C, 5-day)	mg/1	30	45	—	60	—
Suspended Solids	mg/1	30	45	—	60	—
Coliform Organisms (Total)	NPN/100 ml	—	—	23	230	—

Chlorine Residual	mg/1	—	—	—	0.1	—
Toxicity Concentration	tu	—	—	1.5	—	2.0

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- a. The arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days.
 - b. The arithmetic mean of the values for effluent samples collected in a period of 7 consecutive days.
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"2. The arithmetic mean of the BOD (20° C, 5-day) and suspended solids values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85 percent removal).

"3. Neither the treatment nor the discharge of pollutants shall create a nuisance or a pollution as defined in Section 13050 of the California Water Code."

* * *

"6. The dissolved oxygen of treatment ponds shall not be depressed below 1.0 mg/1.

"7. The concentration of the hydrogen ion (pH) shall not be less than 6.5 nor greater than 8.5.

"8. There shall be no discharge of untreated waste at any time."

"D. PROVISIONS

"4. The discharger shall comply with... Monitoring and Reporting Program No. 74-218... as specified by the Executive Officer.

"C. PROVISIONS

- "2. In addition to providing adequate capacity for existing waste flows in the City's system, the discharger shall comply with the following time schedule to assure that adequate capacity in the system is available to convey and treat proposed waste flows from McKinleyville Community Services District in accordance with the requirements of this Order.

<u>Task</u>	<u>Compliance Date</u>	<u>Report of Compliance Date</u>
Complete evaluation of sewer system and treatment plant capacity.	January 1, 1977	January 15, 1977
Begin necessary modifications to treatment facility.	July 1, 1977	July 15, 1977
Complete modifications.	Prior to connection of waste flows from McKinleyville."	

The Regional Board staff testimony and the record disclose the following: Average and maximum BOD limits were violated and that the 85 percent removal limit was violated for four of twelve months in 1977. This is not controverted by Arcata. The 85 percent suspended solids removal limit was violated for three of twelve months in 1977. This is not controverted by Arcata. The dissolved oxygen limits are consistently violated causing anaerobic conditions in the sewage treatment lagoons creating a threat of odor nuisance. Arcata argued that the treatment system was not overloaded although they did not dispute that there were depleted dissolved oxygen and septic conditions in the lagoons and ponds. The chlorine residual and toxicity limits were violated. Sixteen of sixty

samples taken in November and December of 1977 exceeded the chlorine residual limitation. Arcata does not dispute these violations. The Monitoring and Reporting Program had not been complied with in its entirety in that a required survey of dissolved oxygen levels, a report documenting the survey results and recommendations for corrective actions were not submitted. This is not disputed by Arcata. Regional Board staff sampling for bacterial concentrations during March, 1977, indicates substantial violations of the daily maximum and Arcata's data for 1977 shows violations of a lesser magnitude. The pH levels commonly exceeded 8.5 in July and August of 1977. Arcata does not dispute these violations.

In addition to the above evidence in the record, Arcata's Public Works Director and City Attorney admitted most of the violations of requirements. In view of the clear and substantial evidence in the record, we find no merit to this contention.

2. Contention: Arcata contends that the prohibition on additional discharges to the sewer system is not supported by the evidence.

Findings: State Board regulations (Section 2244(b), Subchapter 9.1, Chapter 3, Title 23 of the California Administrative Code) provide that prohibitions on additional discharges to a sewer system should be included in a cease and desist order "if the further addition in volume, type or concentration of waste ... would cause an increase in violation of waste discharge requirements or increase in the likelihood of violation of requirements." Section 2244(c) provides that a prohibition should not be imposed when the violations can

be "immediately corrected." Considerable evidence was heard regarding anaerobic or septic conditions in the sedimentation lagoon and oxidation pond arising from depleted dissolved oxygen and excessive BOD. The Regional Board staff testimony stated that, while additional discharges may not cause immediate increased violations due to the large oxidation pond which acts as a temporary buffer, eventually sludge buildup in the pond would restrict circulation, further deplete dissolved oxygen and precipitate serious and prolonged discharge of BOD and suspended solids. In view of the kind of violations and the nature of the Arcata treatment process, we find that additional violations, or the likelihood thereof, would be expected to occur with additional discharges to the sewer system. Arcata's response to the staff testimony was that its "alternative wastewater treatment system" would correct these problems. We will further address this contention below.

In view of this testimony and the absence of the prospects for "immediate" corrections of the violation, we find this contention to be without merit.

3. Contention: Arcata contends that Order No. 78-25 was directed solely at past violations and that the prohibition is a "punitive measure for past failure to comply."

Findings: As we stated above, the record shows clear and substantial evidence of violations of requirements in the nature of past, current at the time of the Regional Board hearing, and threatened violations. State Board regulations (Section 2240, Subchapter 9.1, Chapter 3, Title 23 of the California Administrative Code) provide that cease and desist orders should be adopted whenever significant violations of requirements

are threatened, are occurring or have occurred and there is a likelihood that the violations will continue. Order No. 78-25 seems an appropriate response to these violations, and we find nothing in the record to indicate that the order is a "punitive action."

Arcata objected in the record to Provision 7 of Order No. 78-25 which provides that exclusion from the prohibition must be approved by the Executive Officer. This delegation is provided for in Section 2244.2(d) of the State Board's regulations. We find that this delegation is appropriate. We note that any person dissatisfied with the Executive Officer's determination may appeal to the full Regional Board.

4. Contention: Arcata contends that certain provisions of Order No. 78-25 violate Water Code Section 13360 in that they specify the manner of compliance with waste discharge requirements.

Findings: Provision 3 provides a time schedule for assuring that adequate capacity is available in the Arcata system for proposed waste flows from the McKinleyville Community Services District (McKinleyville). It reads as follows:

<u>Task</u>	<u>Compliance Date</u>
Prepare plans for interim service for McKinleyville	April, 1, 1978
Begin modifications for interim service for McKinleyville	July 1, 1978
Complete modifications for interim service for McKinleyville	September 1, 1978

Provision 4A requires Arcata to "provide all possible assistance

and diligently execute all institutional arrangements required, to commence construction of the Humboldt Bay Wastewater Authority Project on or before June 30, 1978."

Arcata and McKinleyville have executed agreements whereby Arcata will treat wastewater from McKinleyville on an interim basis. This additional flow will constitute a substantial increase to Arcata's wastewater treatment system and requires careful planning to accommodate such flow. The agreements were voluntarily executed by Arcata to accept the McKinleyville flow. We find that the very general tasks (i.e., "prepare plans," "begin modifications" and "complete modifications") specified in Provision 3 are appropriate and do not direct the manner of compliance with requirements.

Regarding Provision 4A, Arcata is a member of the Humboldt Bay Wastewater Authority (HBWA) and, as such, has made certain commitments toward implementation of the HBWA project. In our Order No. WQ 77-21, we discussed in detail the HBWA project and the pilot alternative wastewater project that may be pursued by Arcata. In that order we upheld the North Coast Regional Board in prohibiting a continuation of full-scale sewage discharges to Humboldt Bay by Arcata but also agreed to seriously consider an application for funding of a pilot project to give Arcata an opportunity to gather data which may eventually support a decision to allow full-scale discharges. We also suggested some ways in which Arcata could continue to participate in the HBWA project without jeopardizing the possibility of implementing its alternative project in the future. In view of this background, we do not feel that requiring Arcata to "provide all possible assistance and diligently execute all

institutional arrangements" for commencement of the HBWA project by a specified date directs the manner of compliance with requirements. It simply provides a bench mark by which the Regional Board can judge whether Arcata is making reasonable progress toward compliance with the requirements to terminate its discharge to the Bay. Consequently, we find Provisions 3 and 4A to be appropriate and proper.

5. Contention: Arcata contends that its Alternative Wastewater Project will remedy the violations of requirements immediately upon construction and operation.

Findings: Considerable time at the Regional Board public hearing was spent in discussion of Arcata's proposed Alternative Wastewater Treatment Project. The record discloses considerable dispute regarding whether the State Board had as of that date approved a pilot Alternative Project for grant funding and the scope of the project which had been approved, if any.

On January 25, 1978, the date of the Regional Board hearing, a pilot study had not been approved. On July 20, 1978, we placed the City of Arcata's Marsh Treatment Pilot Study on the 1977-78 and 1978-79 priority list for a 100% (\$10,000) Step 1 Grant to develop a proposed pilot study. This grant will further enable Arcata to define the scope of the pilot study; however, it is anticipated that said study, when more fully developed, will treat only a small percentage of Arcata's current dry weather flow (1.5 mgd).

In view of the fact that the pilot study is still in its formative stages, and is not expected to treat a large percentage of Arcata's total flow, we find that it is not possible to predict its effect on violations of requirements at the treatment plant.

6. Contention: Arcata contends that it demonstrated at the Regional Board hearing that it already met the criteria for removal of a prohibition of additional discharges and that, therefore, the imposition of a prohibition was unreasonable.

Findings: According to State Board regulations (Title 23, California Administrative Code, Chapter 3, Subchapter 9.1, Section 2244.3(a)) the general rule is that a prohibition or restriction on additional discharges to a community sewer system will not be removed until consistent compliance with all requirements which were the basis for imposing the prohibition has been achieved. As an exception to the general rule, Section 2244.3(a) allows a Regional Board to remove a prohibition on additional discharges prior to consistent compliance with requirements only if the Board makes the following findings:

- "1. that consistent compliance with requirements can be achieved only by construction of a facility which will take a substantial period of time to complete, and
2. that the discharger has the capacity, authority, and financial resources to complete the corrective measures necessary to achieve compliance and is currently proceeding with such corrective measures, and

3. that the corrective measures necessary to achieve compliance with requirements will be completed and placed into operation by the discharger in the shortest practicable time, and

4. that all practicable interim repairs and improvements to the treatment process of the discharges which can be made have been made, and

5. that during the interim period of time until compliance with requirements can be fully achieved the treatment process of the discharges will be so managed, operated, maintained and repaired as to reduce to a minimum the violations which resulted in the imposition of the prohibitions or restrictions, and that such minimum violations for the interim period of time involved will not significantly impair water quality or beneficial uses."

The evidence for removal of a prohibition of additional discharges presented at the Regional Board hearing was solely based upon the fact that Arcata planned the pilot study discussed in Contention 5 above. We do not believe that this evidence is a basis for removal of the prohibition at this time.

Further, the Regional Board was considering whether to impose, not remove, such a prohibition. Section 2244.3 provides the basis for removal of a prohibition. Removal or modification of Order No. 78-25 is an issue for a separate Regional Board hearing and will not be considered in this order.

III. ORDER

IT IS HEREBY ORDERED that:

1. Regional Board Order No. WQ 78-25 is appropriate and proper.
2. The Petition for Review filed by the City of Arcata is dismissed.

Dated: SEP 25 1978

/s/ John E. Bryson
John E. Bryson, Chairman

/s/ W. Don Maughan
W. Don Maughan, Vice Chairman

Absent
W. W. Adams, Member

/s/ William J. Miller
William J. Miller, Member

/s/ L. L. Mitchell
L. L. Mitchell, Member